



# Sunscreen

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# Sunscreen Questions Answered

The best way to avoid skin damage from the sun is to stay in the shade. For the days we have to be out in the sun we need sunscreen

There are many sunscreens on the market

- Which ones are most effective
- Which ones are safe for children
- What is the difference between SPF, UVA and UVB, Chemical, and Physical sunscreens



# SPF

SPF stands for sun protection factor. It is the measurement of the amount of solar energy that will cause a sunburn on someone wearing sunscreen in comparison with someone who isn't.

For example, SPF 30 blocks 97% of UVB rays.

**SPF 50 will not last longer than SPF 30. Regardless of SPF level, they need to be applied just as often**

# UVA and UVB protection

Ultraviolet A or UVA sun rays will cause damage beneath the surface of our skin.

Ultraviolet B or UVB sun rays are shorter light rays they can be easily blocked by glass. However, these rays are responsible for our sunburns.

Both sun rays can be cancer causing. It is important to note that your sunscreen provides "UVA/UVB", "broad spectrum" or "multi-spectrum" protection.

In Europe and Japan, sunscreens are given a PA factor. This measures UVA protection. The rating ranges from "+" to "++++". The best protection is a PA rating of ++++.

# Physical vs. Chemical

## Physical or Inorganic

- Zinc Oxide
- Titanium dioxide
- Works by absorbing 95% of sun rays.
- They are often tinted to match a flesh tone and processed with synthetic chemicals for smooth application. Otherwise, they will appear white and clumpy on your skin.

## Chemical or Organic

- All other sunscreens that do not have zinc or titanium as their active ingredient
- Absorbs into skin unlike physical sunscreen
- Works by a chemical reaction in the skin that converts UV rays into heat.

# How Long Can You Go Between Applications

Apply enough sunscreen to ensure effectiveness

- For example: The average person in a swim suit will need 1 ounce of sunscreen (i.e. a shot glass) every 2 hours.
- Six hours of sun exposure will require at least 3 ounces of sunscreen and 3 separate applications.
- This applies to all skin tones.
- Skin cancer survival rates are lower in non-white populations. This is likely related to the belief that dark skin is not effected.

# Sensitive Skin

Physical sunscreens are recommended for babies and those with sensitive skin

- Rashes and allergic reactions are less likely to develop in formulations with zinc oxide.
- Spray sunscreens make application quicker in older children who have difficulty sitting still.
- For face application, spray into hands then apply to the face to avoid inhalation or contact with the eyes.

# Are There Harmful Ingredients in Our Sunscreen

## Face and Body

It is not necessary to have a separate sunscreen for your face. If breakouts are a concern, lightweight and non-greasy sunscreens will be less likely to clog pores and irritate the skin.

Should we be concerned about these ingredients?

Absolutely not: All ingredients are tested and cleared by the FDA

If skin irritation is a concern, choose a physical sunscreen over and chemical sunscreen.

Use hypoallergenic and fragrance free formulations for skin conditions such as rosacea and eczema.

The ingredient Oxybenzone, found in chemical sunscreen, has been linked to hormone disruption. However, this would require 277 years of exposure.

Nanoparticles, which are found in physical sunscreen, are safe for humans. They remain in the outermost layer of our skin.

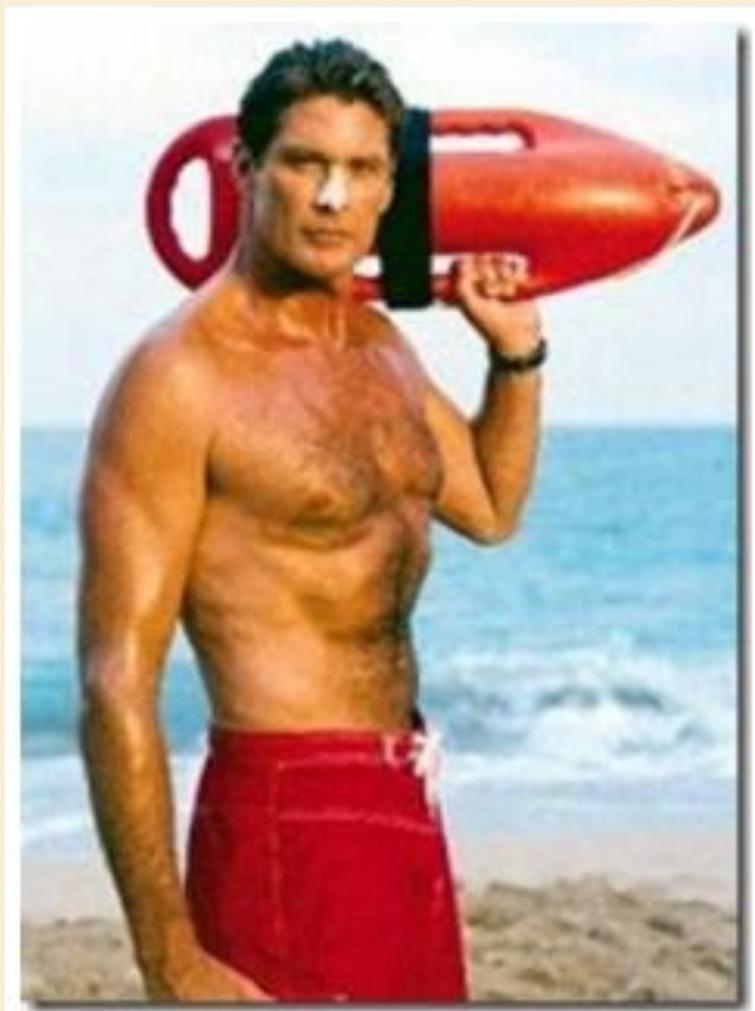
# Hawaii's Sunscreen Ban

Earlier this year the state of Hawaii passed a law that banned two active ingredients that are common in chemical sunscreens.

## Oxybenzone and Octinoxate

This law will come into effect in 2021

- The reason behind this ban is because of a correlation between these ingredients and coral reef bleaching.
- Some physical sunscreen have a the same effect on coral reefs if they contain nano-particles.
- If your sunscreen is likely to be exposed to coral reefs. There are sunscreens available that do not contain these ingredients.
- Look for physical sunscreens that specify non-nano zinc-oxide on the label. As well as chemical sunscreens without oxybenzone and octinoxate.



# Healthy Recipe: Frozen Yogurt Bark

- Line a cookie sheet with parchment paper
- Use plain Greek yogurt (can be sweetened with maple syrup, honey, or agave)
- Spread a generous amount of yogurt on a lined cookie sheet
- Add sliced strawberries, kiwi, mango, and blueberries (can be fresh or frozen)
- Freeze for 6-8 hours
- Break up the bark into bite sized pieces
- Enjoy!

